Quantico Marine Corps Combat Development Command

Size: 60,000 acres

Mission: Provide military training and support research, development, testing, and evaluation of military hardware

HRS Score: 50.00; placed on the NPL in June 1994

IAG Status: RCRA FFCA signed December 31, 1991; Federal Facility Agreement under negotiation **Contaminants:** PCBs, pesticides, VOCs, phenols, heavy metals, petroleum hydrocarbons, and arsenic

Media Affected: Surface water, sediment, and soil

Funding to Date: \$34.1 million

Estimated Cost to Completion (Completion Year): \$102.4 million (FY2021)
Final Remedy in Place or Response Complete Date for All Sites: FY2014



Quantico, Virginia

Restoration Background

Quantico Marine Corps Combat Development Command operated a municipal landfill throughout the 1970s. After the 26-acre landfill closed, the area was used by the Defense Reutilization and Marketing Office as a scrap yard. During that time, polychlorinated biphenyl (PCB)-containing transformers were drained onto the ground so that copper and transformer casings could be recovered. Contamination at the old landfill area was the primary reason for the installation's placement on the National Priorities List (NPL). Site types at the installation include surface disposal areas, landfills, underground storage tanks (USTs), and disposal pits that contain contaminated soil, surface water, and sediment.

Since FY81, 243 solid waste management units (SWMUs) have been identified at Quantico. The number of SWMUs is expected to increase with the soon to be signed Federal Facility Agreement (FFA). The database contains an official count of 27 Installation Restoration (IR) sites, 71 SWMUs, and 2 USTs. Between FY81 and FY94, the installation completed Preliminary Assessments for 17 sites and 24 SWMUs, Site Inspections for 7 sites, RCRA Facility Assessments for 4 SWMUs, and RCRA Facility Investigations (RFIs) for 5 SWMUs. A corrective measures study (CMS) was completed for one SWMU. In addition, initial site characterizations were completed for two UST sites, and an investigation was completed for one UST site.

The installation completed several Interim Remedial Actions (IRAs): in situ soil treatment and long-term monitoring (LTM) for one SWMU; removal of PCB-contaminated soil and scrap metal from two sites; removal and incineration of pesticide- and arsenic-contaminated soil from one site; installation of runoff controls at one site; removal of waste from an embayment and

placement of a stone revetment along the shoreline; and removal of petroleum-contaminated drums, tanks, and bulk containers from a UST site.

During FY95, the installation began developing a corrective action plan for one UST site, completed a Corrective Measures Design (CMD), began corrective measures implementation (CMI), and started capping a landfill for one SWMU. A CMD, CMI, and final Remedial Action (RA) for removal of contaminated soil also were completed, and operations and maintenance and LTM were initiated for two SWMUs. During FY96, the installation prepared Remedial Investigation and Feasibility Study (RI/FS) work plans for seven sites and began an IRA for capping a landfill at one site. In FY97, the installation signed a Record of Decision (ROD) for one site, initiated two early actions, and began LTM for one SWMU and RI/FSs for several sites. The installation entered into a partnership, called the Quantico Environmental Restoration Team, with regulatory agencies and contractors.

A technical review committee (TRC) was formed in FY89. In FY92, the installation established three information repositories, each containing a copy of the administrative record. In FY95, a community relations plan was completed. Although occasionally TRC meetings are held, there has been insufficient interest to convert the TRC to a Restoration Advisory Board.

FY98 Restoration Progress

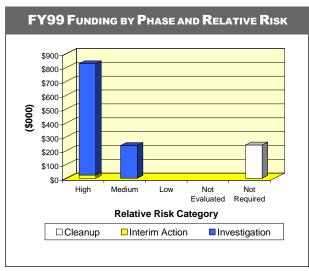
The IRA for capping the landfill was completed. The installation used a barrier layer to minimize exposure to the landfill, an innovative approach that was safe for human health and also resulted in a cost savings of over \$5 million. An RI continued at

this site, and four other RIs continued, with three of the sites nearing RODs. IRAs also were completed at two other UST sites. The CMS, corrective action, and screening investigations for four SWMUs, all scheduled for FY98, were found to be unnecessary. RI/FSs are under way at Sites 4 and 20, and RI/FSs for Sites 1, 5, and 17 were drafted and are awaiting EPA comment. The Remedial Design (RD) and RA for one site were delayed because additional sampling was required to fill data gaps. The investigations of 20 sites and SWMUs are under way. Five site screening areas are under investigation as well.

Under a consensus agreement developed by the team, 84 of the 100 sites and 111 areas of concern (AOCs) will be investigated as either desktop audit, desktop audit with sampling, or site screening process sites. This process allows the installation to systematically review a majority of the sites under the IR program. The Quantico Environmental Restoration Team continues to participate in a formal partnering process with federal and state regulatory agencies.

Plan of Action

- · Complete site screenings at 15 AOCs in FY99
- · Complete RIs at Sites 4 and 20 in FY99
- Finalize RI/FSs and prepare RODs for Sites 1, 5, and 17 in FY99
- Sign FFA in FY99
- Initiate sampling at 20 sites and SWMUs and 5 site screening areas in FY99
- · Initiate RD and RA for one site in FY00



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